Finding Common Ground on Western Lands

Use of the Nation's 2.3 billion acres, including the half-billion acres in Western States, depends not simply on whether they are publicly or privately owned, but also on how the multiple interests in each acre, including rights to water and other resources, are distributed. This article describes how voluntary agreements between private landowners and a variety of public and private agencies increasingly influence how those interests are distributed and how social, economic, and environmental objectives are met.

Recent years have seen rapid population growth and economic change in the American West. These changes have generated considerable debate about the ways in which the West's public and private lands are used. How can traditional claims on public range, forest, energy, and mineral resources be balanced with the recreational and environmental interests of new residents and the general public? What rights do property owners have to use their land as they choose and to enjoy the benefits of such use? What responsibilities do owners have to avoid land uses that cause harm to their neighbors or to the rest of society?

Such questions are matters of legitimate public debate, and can be expected to remain so well into the future. Nevertheless, reducing the scope of the debate is possible by focusing more clearly on the nature of landownership and, in so doing, identifying areas of potential agreement among landowners, environmental groups, and taxpayers in general. This article describes how the voluntary acquisition and conveyance of partial interests in western land can offer common ground on which to balance competing social, economic, and environmental objectives.

Landownership Consists of Multiple Interests

Property and ownership are legal concepts rooted in social institutions. They refer not simply to material objects but to the relations between individuals and society that govern access to material objects. *Real property* refers specifically to interests in land, such as rights to draw water, graze livestock, produce crops, or build houses.

Keith Wiebe and Abebayehu Tegene are economists in the Resource Economics Division, ERS, USDA. Betsey Kuhn is the Director of ERS' Food and Rural Economics Division. Typically, many interests are defined in even a single parcel of land. Interests may arise from custom or tradition; may be defined by laws, regulations, and court decisions at the Federal, State, and local levels (as in zoning); or may be negotiated between private parties on a market basis (as in lease agreements).

The bundle of interests that comprise ownership of a particular parcel of land may remain largely intact in the hands of a single landowner, and indeed this is the way in which landownership is commonly understood. But those same interests may also be allocated among multiple parties, both public and private, as when a landowner leases land to a farmer or conveys a utility easement to a public agency, or when a private corporation acquires the right to extract minerals or harvest timber on public land.

The allocation of partial interests in land across multiple holders thus blurs the conventional distinction between what we think of as public and private land. It also presents opportunities for public agencies to balance resource use and conservation objectives on both public and private land without relying on the relatively blunt instruments of regulation (with its associated political costs) or outright land purchase or sale (with its associated financial costs). Use of partial interests as policy tools, however, is not without costs.

Interests in Western Lands Have Changed in Important Ways

The evolution of landownership in the United States can be summarized in three overlapping phases. From 1776 through the mid-1800's, the Federal Government acquired lands through treaty, purchase, annexation, and cessions by the original 13 States. Beginning in the 19th century and lasting well into the 20th, the Federal Government

conveyed lands to States, settlers, railroad corporations, and others, and provided incentives for their conversion and use. In the final phase, the Federal Government has gradually withdrawn incentives for intensifying land use and replaced them with restrictions on land use and incentives for land conservation and restoration.

Between 1781, when the original 13 States began ceding territory west of their present boundaries to the United States, and 1867, when Alaska was purchased from Russia, the Federal Government acquired roughly 2 billion acres of land through cessions, treaties, purchases, and annexations. (The land within the original 13 States, comprising 305 million acres, never belonged to the Federal Government. Hawaii's 4 million acres were annexed in 1898.)

Even before territorial establishment was complete, the Federal Government began selling, granting, and otherwise conveying newly acquired lands to States, settlers, railroad corporations, and others to encourage westward expansion, settlement, and growth. A total of 328 million acres were granted to States for the construction of schools, roads, and for other purposes (U.S. Department of the Interior). Nearly 288 million acres were granted or sold on favorable terms to homesteaders, and another 61 million acres were granted to veterans as military bounties. Over 94 million acres were granted to railroad corporations. To date, a total of 1.1 billion acres have been conveyed by the Federal Government to States and other nonfederal entities.

In addition to the disposition of lands, the Federal Government influenced how State and private lands were used. In some cases, land grants were conditional on subsequent land conversion and use. For example, among the 328 million acres granted to States, 65 million acres of wetlands were transferred on condition that the proceeds from their sale to individuals be used to convert wetlands to farmland.

While most of the midwestern prairie was quickly brought into private ownership and converted for cultivation, the pattern was much different in the drier and more mountainous Western States. There, bottomlands with fertile soil and better access to water were often homesteaded while adjacent uplands were left in Federal ownership. Farmers and ranchers enjoyed virtually unrestricted access to these public lands for livestock grazing.

In time, it became apparent that the benefits of westward expansion, widespread land-use changes, and economic growth were not without cost. On private lands, for example, soil erosion became a national issue in the 1930's, when inappropriate cultivation practices and loss of vegetative cover were blamed for the Dust Bowl and unprecedented flooding along the lower Mississippi River. More recently, loss of wetlands and other natural areas—as well as conversion of farmland, rangeland, and other open

spaces to development—has generated concern at the local, State, and national levels.

Incentive-Based Policy Tools Have Become Increasingly Important on Private Lands

Government policies to address these concerns have taken a variety of forms. Regulatory approaches restrict how land can be used, or when land can be converted from one use to another, in order to protect the interests of neighbors or society at large. Residential zoning is an example of the regulatory approach, as are some programs that protect wetlands and habitat for endangered species.

Due to concerns about the burden that such restrictions may impose on landowners, government policies include incentives to encourage private choices that yield broader public benefits. The preferential tax treatment of farmland provided by California's Land Conservation (or Williamson) Act, for example, is intended to slow conversion of farmland for development. Conservation easements, by which a landowner voluntarily agrees to specified restrictions on land use in exchange for incentives that may include cash payments or tax benefits, are increasingly common. (Conventional easements, by contrast, have been used for centuries to permit specified uses of the land by parties other than the landowner.) A variety of public and private agencies have begun using conservation easements in a broad range of resource policy contexts in recent decades (table 1).

USDA's Conservation Reserve Program (CRP) pays owners of environmentally sensitive land to retire the land from cultivation for 10 years and place it under a protective cover crop of grass or trees. Over 8 million acres are currently enrolled in the CRP in Western States (table 2). USDA's Wetlands Reserve Program (WRP) pays landowners to restore and protect wetlands for periods ranging from 10 years to perpetuity. A relatively small proportion of total lands protected under the WRP is located in the West. An increasing number of State and local governments nationwide now operate "purchase-of-agriculturalconservation-easement" (or PACE) programs, which pay farmland owners to relinquish their development rights and keep their land in agricultural production. Although these programs are concentrated in the Northeast, over 60,000 acres are now protected through PACE programs in California, Washington, and Colorado.

The Nature Conservancy (TNC) is a private agency that focuses on the preservation of natural habitats through conservation easements, land acquisition, and other voluntary agreements with private landowners. Acreage protected by TNC in Western States grew by nearly 50 percent between 1994 and 1998, and now totals over 6 million acres. An additional 1 million acres have been protected

through similar means by smaller land trusts operating at the local and regional level in Western States.

Partial Interests Help Balance Multiple Uses on Public Lands as Well

Growing pressures on natural resources have also led to policy changes on public lands. Shortly after the turn of the century, the cumulative effects of drought and overgrazing raised concerns about the condition of Federal rangeland and led to regulation and management by the Forest Service (FS) and the Bureau of Land Management (BLM). A grazing permit and fee system was established on FS-administered land in 1906, and on BLM land in 1934. Laws passed in 1960 and 1976 established that public lands would be retained in Federal ownership and managed for sustained yields under multiple uses, includ-

ing timber, minerals, energy, grazing, water, recreation, and wildlife. Today, the Forest Service and BLM manage more than 250 million acres of Federal rangeland, most of it in Western States (fig. 1).

Even on federally owned land, private individuals and corporations hold a variety of partial interests, including rights of way, mineral leases, and oil and gas leases (Laitos and Westfall). Such interests are legally distinct from grazing permits and livestock-use permits, which are revocable licenses and "convey no right, title, or interest held by the United States in any lands or resources" (U.S. Department of Agriculture).

In economic terms, however, grazing permits share characteristics with conventional easements and other partial interests in land, defining the distribution of returns to

Table 1 **Agencies involved in conservation easement acquisition**A variety of public and private agencies, operating at the national, State, and local levels, acquire conservation easements

	National	State and local
Public	Federal Government agencies (for example, the Natural Resources Conservation Service and the Forest Service)	State & local government agencies (for example, the Colorado Department of Natural Resources)
Private	National nonprofits (for example, The Nature Conservancy and the American Farmland Trust)	Land trusts (for example, the Montana Land Reliance and the Big Sur Land Trust)

Source: Wiebe, Tegene, and Kuhn.

Table 2

Land protected through voluntary agreements between private landowners and selected public and private agencies (cumulative acreage)

Over 15 million acres in the West have been protected through voluntary agreements

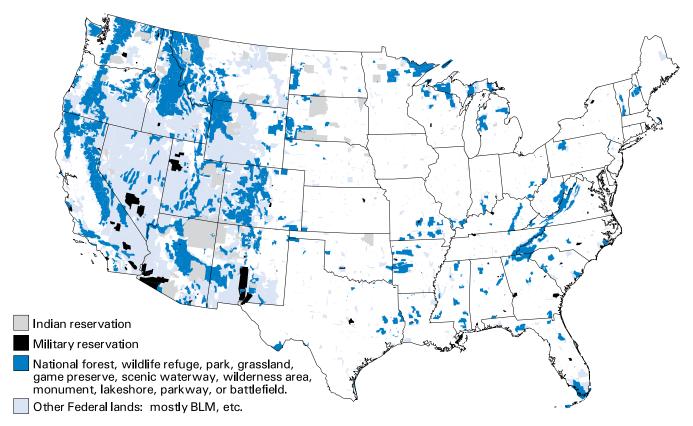
State	Conservation Reserve Program, 1998	Wetlands Reserve Program, 1997	State and local PACE programs, 1997	The Nature Conservancy, 1998	Local and regional land trusts, 1998	
	Acres					
Manustain	0.770.400	F F00		4 700 040	540,000	
Mountain	6,772,402	5,536	2,970	4,708,942	513,200	
Arizona	33	0	0	769,110	3,339	
Colorado	1,953,625	1,544	2,970	194,531	95,593	
Idaho	740,434	1,861	0	140,236	23,042	
Montana	3,052,339	1,994	0	336,676	296,840	
Nevada	1,271	0	0	1,393,030	4,843	
New Mexico	576,102	0	0	1,091,702	28,986	
Utah	189,988	0	0	480,400	22,805	
Wyoming	258,610	137	0	303,256	37,752	
Pacific	1,420,308	33,803	61,715	1,316,636	575,863	
California	132,023	25,335	48,354	822,240	536,922	
Oregon	387,398	2,503	0	358,190	11,711	
Washington	900,887	5,965	13,361	136,206	27,230	
Other	21,717,814	493,687	426,952	4,442,536	2,094,507	
U.S. total	29,910,524	533,026	491,637	10,468,114	3,183,570	

Source: USDA program data, the American Farmland Trust, The Nature Conservancy, and the Land Trust Alliance.

Figure 1

Federal Lands in the contiguous United States by type, 1992

Federally owned lands are concentrated in the West



Source: USDA, ERS, based on data from USGS and NRCS 1992 National Resources Inventory.

various permitted uses among multiple parties. Permittees pay annual grazing fees, currently set by a formula based on an index of rental charges for private rangeland and an index of livestock industry profitability. Federal fees are uniform across States, although private fees vary significantly by location (U.S. Department of the Interior). The permits themselves are free (at least when initially acquired from the government), and generally change hands with the base property to which they are attached. Nevertheless, the difference between the grazing fees paid by Federal permittees and the market value of the acquired forage yields a positive value to permits, which is capitalized into the value of base properties with Federal grazing permits attached.

The administration of Federal grazing permits is the subject of considerable controversy, much of it focused on the ways in which permits are allocated, the uses that permits allow and require, and the fees that permit holders are charged to graze livestock. Currently, permits may be held only by owners of private base properties capable of supporting a livestock operation, and the BLM gives preference to applicants who own base properties next to the public land on which grazing is to be permitted. Permits also prohibit nonuse or conservation use of grazing allotments for extended periods. Finally, Federal grazing fees

are considerably lower than fees charged on State-owned or private grazing land (U.S. Department of the Interior).

Critics argue that such preferential treatment, use requirements, and low fees reduce efficiency, contribute to environmental degradation, and deprive the public of increased revenues (Rylander). Indeed, calls for market-oriented reforms to address these issues have come from a wide variety of public and private organizations across the political spectrum, including the Cato Institute, the Natural Resources Defense Council, the Political Economy Research Center, and the Council of Economic Advisers.

The similarity between grazing permits and conventional easements suggests the possibility of a market-oriented institutional innovation that could provide benefits to landowners, environmental groups, and taxpayers alike. Specifically, proponents of reform (such as those noted in the previous paragraph) suggest that grazing permits be traded in an open market, allowing competition among ranchers, environmental groups, and others to determine the value and use of public grazing allotments. In effect, such a development would mirror the evolution of conventional easements to include conservation easements, such as those currently acquired from willing landowners through the programs described earlier. Similar argu-

Table 3 **Relative costs of alternative land policy strategies** *Alternative land policy strategies involve differing costs*

Transaction	Regulation	Partial interest acquisition	Land acquisition
		Costs*	
Negotiation Acquisition Monitoring Enforcement Political	Low Low Medium-high Medium-high High	High Medium Medium-high Medium-high Low	Medium High Low Low Low

^{*} Relative magnitudes are intended to be comparable across columns, but not across rows.

Source: Wiebe, Tegene, and Kuhn.

ments have been made with regard to timber harvest permits, water diversion rights, and use of other resources on public lands.

Partial Interests Involve Costs, Too

Partial interests offer a means to balance resource use and conservation objectives on public and private land without incurring the political costs of regulation or the full financial costs of outright land acquisition. As tradable instruments, partial interests also offer a means by which broader social objectives, such as the preservation of wetlands or habitat for endangered species, may find a market "voice" in voluntary transactions with private landowners. While this may provide important signals about public and private resource values, it is important to remember that insufficient weight may be given to other social objectives, including the support of resourcedependent communities in the West (Council of Economic Advisers). In fact, the Interior Department issued regulations in 1995 allowing conservation use of grazing allotments for the full 10-year permit period (Federal Register), but such changes have since been suspended in response to legal challenges by traditional resource users in Western States.

Finally, partial interests can be—and in fact must be—tailored on a case-by-case basis to meet specific program and landowner goals on specific parcels of land. As a result,

however, partial interests can involve significant costs in negotiation, monitoring, and enforcement. In some cases, these costs may even outweigh potential savings relative to regulation or land acquisition (table 3). These costs may increase in the future, as landowners not party to the original easement transaction either purchase or inherit easement-encumbered properties. Alternatively, such costs may be moderated by increasing experience with administering such programs. In either case, no single one of the three alternative land policy strategies—regulation, partial interest acquisition, or land acquisition—will be optimal or even sufficient in all situations. Given the costs of each strategy and the complexity of the resource policy issues that are to be addressed, it remains to be seen how these alternatives will be balanced in the ongoing debate over the management of public and private lands in the West.

For Further Reading . . .

Council of Economic Advisers, "Refining the Role of Government in the U.S. Market Economy," *Economic Report of the President*, Washington, DC, Feb. 1997.

Federal Register, "Final Rule on Grazing Administration," Feb. 22, 1995.

- J. Laitos and R. Westfall, "Government Interference with Private Interests in Public Resources," *Harvard Environmental Law Review* 11(1), 1987.
- J. Rylander, "Accounting for Nature," Land Letter 15(1), Jan. 1996.
- U.S. Department of Agriculture, Forest Service, *Grazing Statistical Summary FY1991*.
- U.S. Department of the Interior, Bureau of Land Management, *Public Land Statistics*, 1997, 1998.
- U.S. Department of the Interior, Bureau of Land Management, *Rangeland Reform '94*, 1994.

Keith Wiebe, Abebayehu Tegene, and Betsey Kuhn, *Partial Interests in Land: Policy Tools for Resource Use and Conservation*, AER-744, USDA-ERS, Nov. 1996.